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A horizontal progress bar consisting of 25 empty square boxes, indicating a task that is not yet completed.

Nature Magazine AlphaGo Zero paper [1]

1

A decorative horizontal bar consisting of a series of small, evenly spaced rectangular blocks, likely made of wood or a similar material, arranged in a repeating pattern.

talent pool

人才庫 talent pool

卡尔·莱蒙德·波普尔 Karl Raimund Popper

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STEM Science, technology, engineering and mathematics

“**新華社**”是中國人民解放軍報社的直屬機關，是中國人民解放軍報社的報道中心。

Deepmind AlphaGo ပုဂ္ဂန်

Deepmind ပုဂ္ဂန် အာမျိုး ပုဂ္ဂန် ပုဂ္ဂန် [2] ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန်

AlphaGo Master ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန်

AlphaGo Zero ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် [3] ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် 16 ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် 18 ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် 14 ပုဂ္ဂန် 45 ပုဂ္ဂန်

1) Nature Magazime ပုဂ္ဂန် AlphaGo ပုဂ္ဂန် Deepmind ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန်

2) ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် local trap ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် AlphaGo ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo ပုဂ္ဂန်

AlphaGo Zero ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် [4] ပုဂ္ဂန် game ပုဂ္ဂန်

Superhuman ပုဂ္ဂန် ပုဂ္ဂန် Clock ပုဂ္ဂန် IBM S/360 ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် superhuman IBM S/360 ပုဂ္ဂန် superhuman ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် Nature Magazine ပုဂ္ဂန် AlphaGo Zero paper ပုဂ္ဂန် superhuman ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန်

superhuman ပုဂ္ဂန် Technological Singularity ပုဂ္ဂန် ပုဂ္ဂန် Demis Hassabis ပုဂ္ဂန် AlphaGo ပုဂ္ဂန်

IBM S/360 ပုဂ္ဂန် Alpha ပုဂ္ဂန် IBM S/360 ပုဂ္ဂန် Deep Blue ပုဂ္ဂန် Deep Blue ပုဂ္ဂန် Alpha ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် [5]

AlphaGo ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် Deepmind team ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန်

AlphaGo Zero ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် [6] ပုဂ္ဂန် Nature Magazine ပုဂ္ဂန် AlphaGo Zero paper ပုဂ္ဂန် AlphaGo Master ပုဂ္ဂန် deep-learning ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန်

AlphaGo Zero ပုဂ္ဂန် AlphaGo Zero ပုဂ္ဂန် superhuman [7] ပုဂ္ဂန် ပုဂ္ဂန် ပုဂ္ဂန် superhuman ပုဂ္ဂန် ပုဂ္ဂန် superhuman ပုဂ္ဂန် deep-learning reinforcement ပုဂ္ဂန် ပုဂ္ဂန် superhuman ပုဂ္ဂန်

100 / 100

AlphaGo Zero は AlphaGo Master と対戦する。AlphaGo Master は superhuman である。AlphaGo Master が 60 手で勝利した。3 手で勝利した。AlphaGo Master は superhuman である。AlphaGo Master が 60 手で勝利した。AlphaGo Zero は superhuman である。superhuman [8] である。

AlphaGo AlphaGo AlphaGo AlphaGo AlphaGo

阿尔法围棋 AlphaGo 汤姆森 Turing Machine 深度学习 deep-learning 阿尔法围棋 AlphaGo 纳什均衡博弈论 博弈论 深度学习 Deepmind 阿尔法围棋 AlphaGo 零 AlphaGo Master 阿尔法围棋 AlphaGo 零 AlphaGo 零 阿尔法围棋 AlphaGo 零

Deep-learning credit reinforcement learning credit reinforcement local trap

ideas are cheap idea cheap reinforcement [9]

leukotomy reinforcement peer review Socratic method peer review Socratic method peer review

AlphaGo သည် reinforcement learning ပညာနည်းပညာ၏ အကြောင်းအရာဖြစ်ပါသည်။

[10]

A horizontal row of twelve empty square boxes, intended for a student to draw a picture in.

[11]

图灵机 Turing Machine 图灵完备性 Turing completeness
图灵机 Turing Machine 本地陷阱 local trap 全局通用性 Universal approximation 全局性 Globality

_____Socratic method_____

Superhuman សម្រាប់ប្រើប្រាស់
Superhuman សម្រាប់ប្រើប្រាស់

Superhuman សម្រាប់ប្រើប្រាស់
Superhuman សម្រាប់ប្រើប្រាស់

Alan Turing និង Geoffrey Hinton និង Demis Hassabis នឹងបានរកឃើញថា
AlphaGo នឹងបានរកឃើញថា

Demis Hassabis និង AlphaGo នឹងបានរកឃើញថា [12] នឹងបានរកឃើញថា
Geoffrey Hinton នឹងបានរកឃើញថា

Turing Machine នឹងបានរកឃើញថា Turing Machine នឹងបានរកឃើញ
Geoffrey Hinton នឹងបានរកឃើញថា Turing Machine នឹងបានរកឃើញថា Alan Turing នឹងបានរកឃើញ
នឹងបានរកឃើញថា

Dialogue Concerning the Two Chief World Systems [13] នឹងបានរកឃើញ
នឹងបានរកឃើញថា Socratic method នឹងបានរកឃើញ
នឹងបានរកឃើញថា នឹងបានរកឃើញថា នឹងបានរកឃើញថា នឹងបានរកឃើញថា
នឹងបានរកឃើញថា

The Sceptical of Chemist នឹងបានរកឃើញថា

On the Origin of Species នឹងបានរកឃើញថា

នឹងបានរកឃើញថា [14] នឹងបានរកឃើញ

នឹងបានរកឃើញថា

នឹងបានរកឃើញថា

នឹងបានរកឃើញថា នឹងបានរកឃើញថា នឹងបានរកឃើញថា នឹងបានរកឃើញថា
នឹងបានរកឃើញថា

Leukotomy និង BRAIN Initiative

Leukotomy នឹងបានរកឃើញថា

1 នាក់ នាក់ នាក់ នាក់ personalities និង mental diseases នាក់ នាក់ នាក់ នាក់
នាក់ នាក់ នាក់ នាក់ BRAIN Initiative project នាក់ នាក់

2 និង leukotomy នឹងបានរកឃើញថា Leukotomy នឹងបានរកឃើញថា BRAIN
Initiative នឹងបានរកឃើញថា AlphaGo នឹងបានរកឃើញថា

3. **personality** \sqcap **intelligence** \sqcap **Walter Freeman** \sqcap **personality** \sqcap **intelligence** \sqcap [15] \sqcap

BRAIN Initiative project NIH BRAIN 2025 Report “there is general agreement that types can be defined provisionally by invariant and generally intrinsic properties” invariant agreement insights “envision an integrated, systematic census of neuronal and glial cell types” dynamic brain mapping “Link brain activity to behavior” “Produce conceptual foundations for understanding the biological basis of mental processes” mental processes behavior

BRAIN Initiative project 项目旨在研究大脑如何影响性格和智力，通过脑成像技术（brain mapping）来揭示性格和智力背后的隐藏假设（hidden assumptions）。

personality □ intelligence □

□ BRAIN Initiative project □ brain mapping □ mental diseases □
personality □ intelligence □
personality □ intelligence □ leukotomy □

_____ leukotomy _____ AlphaGo _____

personality intelligence mental diseases

BRAIN Initiative ◻ brain mapping ◻
human level intelligence ◻
personalities ◻ intelligence ◻ mental diseases ◻
BRAIN Initiative ◻ neurosciences ◻
AlphaGo ◻ generic human intelligence ◻
AlphaGo ◻
neurosciences ◻ [16] ◻

1

AlphaGo 人工智能

Technological Singularity BRAIN
Initiative project Technological Singularity baseless

AlphaGo Zero achieved superhuman performance

~ ~ ~ ~ ~ ~ ~ ~ ~ ~

[1] □□□□□□□□□□□□□□□□□□

[2] 『Cracking Go』 Deep Blue 『AlphaGo』 AlphaGo 『AlphaGo』

『AlphaGo』と『Crazy Stone』の対戦結果

AlphaGo چیست؟ Google چیست؟
AlphaGo Zero چیست؟ AlphaGo چیست؟
Human level
artificial intelligence چیست؟ AlphaGo چیست؟

Google/Deepmind AlphaGo چیزی که باید بدانید

[5] 人类已经无法跟上机器人的脚步，我们正在向 superhuman 方向发展
Alpha [6]

Deepmind Alpha Nature Magazine Alpha

[6] AlphaGo AlphaGo AlphaGo Master 60+3 AlphaGo

[7] <http://www.alphago-games.com/> Full Strength of Alphago Zero, i.e. Final Form
40 Blocks 20 Blocks Not Full Strength of Alphago Zero
Alphago Zero superhuman

AlphaGo は、Google DeepMind によって開発された強化学習による围棋AIです。2016年3月に人間棋士の李世乭九段を破り、世界で注目されました。

[12] AlphaGo Master AlphaGo AlphaGo AlphaGo AlphaGo AlphaGo AlphaGo AlphaGo

[13] Dialogue Concerning the Two Chief Word Systems 两学记 Socratic Method
对话录

AlphaGo

脳科学研究のための国際的取り組み

[14] BRAIN Initiative project 脳科学研究のための国際的取り組み

[15] 人工知能技術の開発 Demis Hassabis による AlphaGo の開発による人工知能技術の進歩

[16] 人工知能技術の開発 AlphaGo の開発による人工知能技術の進歩